

Experience with cloud vouchers in OCRE

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CERN investigated the use of cloud vouchers to provide IaaS resources to researchers in the Helix Nebula Science Cloud (HNSciCloud) project. HNSciCloud was a €5.3 million project that established a hybrid cloud platform combining commercial services with existing publicly funded on-premise resources, to support the deployment of high performance computing and big-data capabilities for scientific research. Part of the procurement budget was dedicated to procuring cloud vouchers. This exercise demonstrated that:

- cloud vouchers facilitate the distribution of free-at-the-point-of-use cloud resources to individual researchers
- they are particularly suitable for small-scale projects with defined costs and to explore innovative architectures before procuring them at scale

Leveraging lessons learned from HNSciCloud, CERN is currently using cloud vouchers in the context of the Open Clouds for Research Environments (OCRE) project. This project aims to accelerate cloud adoption in the European research community, by bringing together commercial cloud providers and the research and education community. The mechanism for this purpose is a pan-European tender and framework agreements with cloud service providers that meet the specific requirements of the research community.

Cloud vouchers were identified as a powerful tool to encourage consumption of digital services by the so-called Long-Tails-of-Science within the project. In this context, CERN is responsible for:

- identifying individual scientists in need of cloud services for their research
- analysing their requirements
- allocating and distributing cloud vouchers
- collecting feedback

To carry these tasks, CERN established links with two organisations representing the Long-Tails-of-Science in Europe: the European Council of Doctoral Candidates and Junior Researchers (Eurodoc) and the Marie Curie Alumni Association (MCAA). A comprehensive survey was jointly created to scope the needs of individual researchers. The survey was distributed through the Eurodoc and MCAA networks and advertised at international conferences. Between 1st April and 1st September 2019, the survey generated 81 answers, of which 72 were valid.

After analysing requirements from individual researchers based on the responses received, CERN launched the distribution of a first wave of pre-paid vouchers. These vouchers were procured by GÉANT from three suppliers already contracted via the pre-existing GÉANT IaaS framework: a Microsoft reseller, an AWS reseller and CloudSigma, an independent service provider. The total amount of vouchers procured by GEANT is €500,000.

Between November 2019 and June 2020, CERN distributed cloud vouchers with a €500 face value to 70 individual researchers representing the Long-Tail-of-Science in Europe. Researchers were selected by representatives of Eurodoc and MCAA within their networks, taking into account diversity across researcher types, gender, scientific disciplines, and geographical location. Currently, CERN is in the process of collecting the researcher's feedback. Additionally, EGI.eu, as coordinator of EOSC-hub, is another distribution channel of OCRE cloud vouchers. Granted with 75 vouchers, this channel targets Earth Observation researchers in the EOSC-hub Early Adopter Programme.

This presentation gives an overview of the lessons learned on vouchers from HNSciCloud. It presents the outcome of the requirement analysis and details the distribution process of the vouchers in OCRE. Finally, the feedback from researchers so far will be presented.

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